

Understanding the “New Normal”: The Internationalization of Education and Study Abroad during the COVID-19 Era

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Introduction

As confirmed cases of a novel coronavirus, now known as COVID-19, began to spread beyond China’s Hubei Province in early 2020, higher education administrators across the United States began contemplating how their institutions would respond to the health and safety threats presented by a potential coronavirus pandemic. By early March, colleges and universities began hastily announcing campus closures, transitions to online learning, work-at-home orders, event and travel cancellations, dormitory closures, and a broad range of other changes that radically and quickly transformed higher education in the United States (Baker, Hartocollis, and Weise 2020; Kamenetz 2020a, 2020b). In this vein, study abroad programs for spring and summer were recalled or cancelled *en masse* by colleges and universities for the first time in recent memory. Simultaneously, federal, state, and local governments began issuing health advisories, shelter-in-place orders, business closures, travel bans, and other measures to reduce contact between populations and thereby slow the spread of COVID-19. These responses, too, resulted in radical and rapid transformations in the daily routines, working conditions, and social practices of millions of people in the United States.

During the month of March, amidst constantly shifting medical knowledge of the novel coronavirus and daily briefings by health and public officials, a “new normal” emerged. We learned to socially distance, work remotely, wash our hands more diligently, and wear masks around others (Maragakis 2020). We also learned that uncertainty would be an inescapable aspect of pandemic life. From the beginning, though, we have viewed our new normal as temporary—a transition period to the *real* “new normal” that will crystallize after the COVID-19 pandemic recedes. Questions around a potential new normal in a post-COVID era have certainly not escaped higher education administrators, faculty, staff, and students (Blumenstyk 2020; Kim 2020; Lederman 2020; Snyder 2020). These questions fall across a range of issues, from the future of online courses, to job security amidst restructuring, to the availability of professional or academic opportunities, to funding sources, to health and safety on campuses, and many others. Among our own questions, as study abroad program leaders and administrators, is the future of study abroad. The cancellation of spring, summer, and fall study abroad programs in 2020 marks

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a sharp departure from the decades-long expansion of study abroad among U.S. colleges and universities. This expansion, part of a broader trend in the internationalization of education, was made possible by processes of globalization generally and by increases in mobility for many students specifically. At the same time, the features of an interconnected world produced by globalization, including increased mobility through international travel, also provided the pathways to facilitate the outbreak of a global pandemic. With student mobility limited by health concerns and travel warnings, what then is the future of study abroad after COVID-19?

As Amelia Dietrich, Managing Editor of *Frontiers: The Interdisciplinary Journal of Study Abroad*, reflected in the aftermath of spring and summer program cancellations, COVID-19 “has certainly shaken the field of education abroad to its very core,” bringing about an “unprecedented halt [to] what we’ve called study abroad for almost 100 years” and leaving us with a wide range of uncertainties about the future of international education (Dietrich 2020:5–6, 7). This paper begins to address some of these uncertainties by asking: What effects will COVID-19’s “unprecedented halt” of study abroad through mass program cancellations have on students going forward? Which forces and factors will ultimately shape the “return” of study abroad, both for students and for institutions? These practical questions shaped our inquiry into the future of study abroad post-COVID-19 as we consider our own steps going forward as administrators and program leaders. At the same time, these questions allow to us to think more broadly about the role of global events like this pandemic in shaping the ongoing internationalization of higher education such as whether they disrupt internationalization processes, and if so, how do we characterize the disruption(s).

Background: International Education

Internationalization of Education

The expansion of study abroad programming offered by U.S. universities has taken place within the context of an expansion of international education at global scale over recent decades. This expansion is evidenced by increases in numbers of students crossing borders to enroll in universities, an enlargement of the list of “receiving” countries for international students, and the proliferation of “branch” campuses established by universities outside their home countries. Governments and institutions have also increased support for sending and/or receiving students across borders, making these opportunities accessible to more students. At the same time, U.S. colleges and universities have established joint-degree or other co-curricular programs with institutions in other countries, and they have launched online courses and programs that facilitate increased international student enrollment (Bhandari and Blumenthal 2011).

Many of these examples reflect some of the latest trends in the internationalization of higher education, which is defined by Knight as “the process of integrating an international, intercultural, or global dimension into the purpose, functions, or delivery of higher education at the institutional and national levels” (Knight 2008:21). Internationalization has taken place on college and university campuses—ranging from the initial focus on increasing studies of world languages and cultures to more recent efforts to embed intercultural learning outcomes and multiple cultural perspectives into university curricula—as well as outside these institutions’ home countries, particularly in the form of sending students to and recruiting students from other countries (Knight 2012).

As globalization intensified and sites of production and consumption multiplied across industries and sectors, the logics of global competition structuring global commodity chains are being increasingly applied in field of higher education, resulting in a global competition among states and institutions for student enrollment, faculty expertise, research and programming funding, and revenue-generating sources (de Wit 2020; van der Wende 2001). Institutional support for study abroad and other international programs enabled universities to increase their global profiles in the increasingly competitive field of higher education. Indeed some cities and states now count higher education among their top industries, particularly driven by enrollment of international students (Bhandari and Blumenthal 2011; Knight 2012). Government interventions, too, expanded possibilities for study abroad through scholarship programs for students and grant funding for institutions to develop programs that advance national interests (Goodman and Gutierrez 2011).

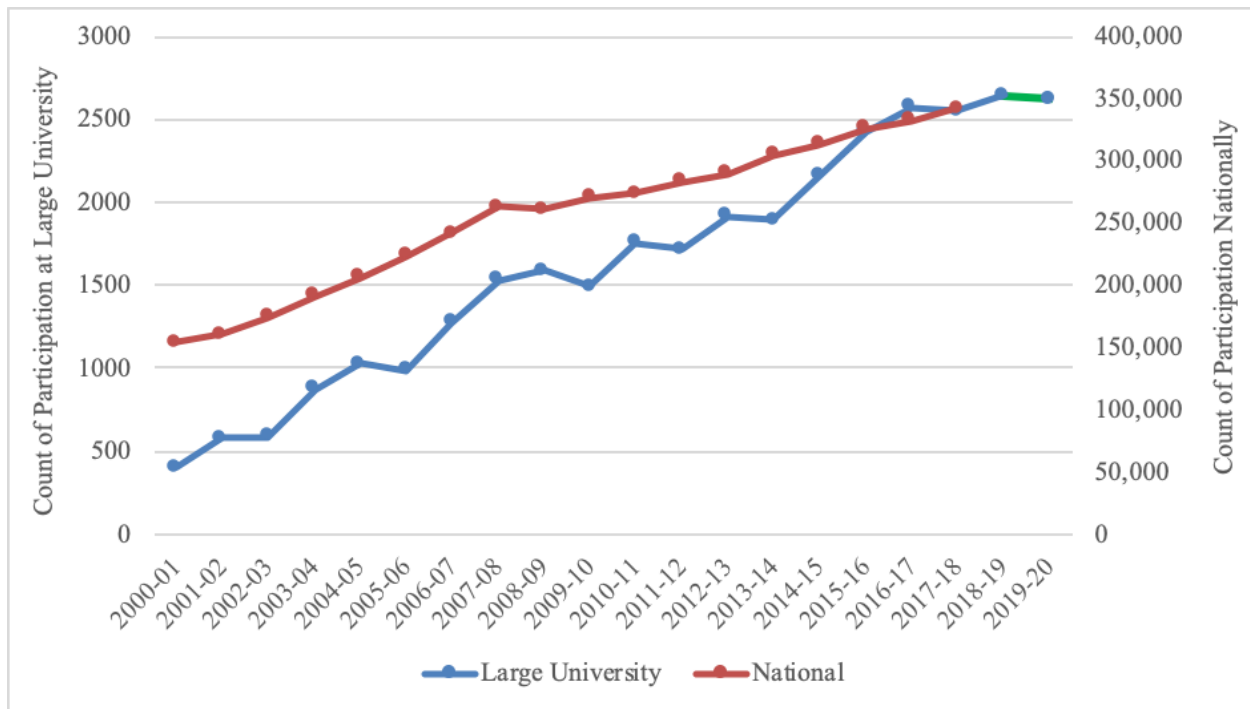
As with all aspects of globalization, however, its effects on education are uneven, intensifying inequalities between those who benefit from and those who are disadvantaged or left behind by globalizing processes. Scholars are increasingly challenging study abroad program leaders and administrators to incorporate questions around privilege into discussions and student work (Breen 2012). At the same time, colleges and universities are establishing scholarships and other means of support to increase enrollments of underprivileged students and those from minoritized and marginalized communities, who are persistently underrepresented in study abroad programs.

Although globalization increased cross-border mobility for populations of the Global North—through, for example, increased transportation networks, tourist infrastructure, and visa waiver programs—the internationalization of higher education depended upon the willingness of students to enroll in study abroad programs and travel. Indeed, previous research showed that students were motivated to enroll in study abroad for a variety of reasons, including professional development, the development of intercultural knowledge and skills, the uniqueness of the opportunity, recommendations of friends or family, and the support available for study abroad (Salyers, Carston, Dean, and London 2015:369). The increasing interest in study abroad programs (and the willingness of students to travel for these educational experiences) emerges clearly both in national study abroad participation data and in our own institution’s study abroad enrollment trends.

Study Abroad Participation Trends

The number of U.S. students studying abroad increased steadily over recent decades, doubling during the 1990s from around 70,000 to nearly 144,000 at the turn of the millennium (Institute of International Education 2020), and then doubling again between 2000 and 2014 (see Figure 1). During the 2017–2018 academic year, the most recent year for which data are complete, more than 341,000 U.S. students studied abroad (NAFSA 2020). Total enrollment in study abroad programs increased by varying amounts each year since at least the mid-1980s, with the exception of the 2008–2009 academic year, which coincided with the peak of the financial crisis in the United States. Participation decreased only slightly that year, however, and upward trends in enrollment resumed the following year. Participation still trended upward, then, in the aftermath of major geopolitical events like the attacks of 11 September 2001 and the U.S. invasion of Iraq in 2003 and in the context of previous regional and global health crises, such as the SARS epidemic of the early 2000s and the Zika virus epidemic of 2015–2016.

Figure 1
Trends in Study Abroad at Purdue University, 2000-2020¹



Source: Large university’s institutional data and various Open Doors reports

According to NAFSA: Association of International Educators, while the number of students studying abroad in 2017–2018 translated to only around 1.7% of all US higher education students, it represented nearly 10% of those completing degrees that year (NAFSA 2020). As study abroad enrollment continues to grow, so too does the list of destinations for U.S. students. Although the majority of U.S. students study abroad in Europe (54.9% in 2017–2018) (NAFSA 2020), program offerings are increasingly expanding to “nontraditional” host countries, especially in the Global South (Wells 2006). While the earliest study abroad programs took the form of semester-long exchanges, in terms of numbers of students, short-term programs overtook semester-long programs in 2006 (Goodman and Gutierrez 2011).

Study abroad participation trends at Purdue University are generally consistent with these national trends (see Figure 1). The number of Purdue students participating in study abroad climbed steadily over the past two decades, beginning with 404 students at the turn of the century and growing to six times that number by 2020. In academic year 2014–2015, Purdue broke into the top 25 ranking of universities for study abroad in the country. Through multifaceted efforts to increase student recruitment, faculty participation, course equivalencies, institutional partnerships, program subsidies, and scholarships, the university made significant strides in increasing access to study abroad opportunities for its students. Participation rates at

¹ University’s total for 2019-2020 includes students (520) enrolled in spring break programs that were cancelled.

Purdue in 2019–2020 were expected to come in close to the previous year’s totals, until study abroad administrators and program leaders, like their counterparts at other universities across the country, were confronted with the threat of the novel coronavirus in late 2019 and early 2020.

Purdue University and the COVID-19 Pandemic

With the advent of COVID-19, Purdue administrators took weighty actions to suspend travel and recall students already on programs to protect the health and safety of students, faculty, and staff. The first in what became a series of travel-related decisions by the university in early 2020 came on 1 February, when Purdue, citing increased State Department travel warnings, suspended university-sponsored travel to China and announced the impending return of six students whose semester-long study abroad programs were already underway in Shanghai (Purdue 2020a). Toward the end of February, by which time coronavirus cases were confirmed in the United States and dozens of other countries, the university extended the ban on university-sponsored travel to four additional countries (South Korea, Iran, Italy and Japan) based on COVID-19 risk levels published by the Centers for Disease Control (CDC) (Purdue 2020b). It was at this stage that spring break study abroad programs outside of China became subject to cancellation, and program leaders to other locations began watching conditions in their destination countries carefully as the number of confirmed cases and the number of affected countries ticked up each day. On 5 March, eight days before the start of Purdue’s Spring Break, all international spring break study abroad programs were cancelled as COVID-19 cases continued to increase in many program destinations, especially in Europe (Purdue 2020c).

In the final days leading up to Spring Break, while announcing the transition to online classes and other changes in campus operations that would begin after the break, the university announced the cancellation of all summer study abroad programs and a prohibition on university-sponsored travel, both domestic and international (Purdue 2020d). While students participating in semester-long programs were first informed early in the term that the university was monitoring the threats posed by the novel coronavirus globally, these semester-exchange students were ultimately recalled around the Spring Break time period and required to return to the U.S. On 29 April, Purdue extended study abroad cancellations to all semester-long programs scheduled for Fall 2020 (The Exponent 2020).

Although the timeline of these decisions varied from institution to institution, colleges and universities across the United States followed a similar trajectory to that of Purdue in cancelling programs. These decisions were taking place within the broader context of federal, state, and local officials implementing a wide range of responses to the pandemic: shutdowns, stay-at-home orders, quarantines, and travel restrictions. Behind many of these policies was a strategy to slow the spread of COVID-19 by suddenly and severely limiting mobility, that very force upon which the growth of study abroad historically depended.

Data and Methods

Emergency measures undertaken by university and government officials had the effects of limiting mobility for global engagement in the immediate terms, but to what extent could these measures and the uncertainty produced by the pandemic stymie plans for the future? To examine

the implications of the COVID-19 pandemic on the future of study abroad participation—and by extension, the continued globalization efforts by universities—we turned to students themselves.

This study uses survey data collected at Purdue to analyze students' perspectives on study abroad in the age of the novel coronavirus (IRB approval: IRB-2020-728). In May 2020, more than 2,500 students (N=2562), either enrolled in upcoming study abroad programs, already participating in programs, or expressing interest in participating in study abroad in the future, were recruited via email to participate in the online survey.² Specifically, the population of interest were students who: (a) had been abroad for Spring 2020 but returned to the U.S. part-way through the semester; (b) enrolled in Spring Break programs cancelled within a week or two of their departure; (c) enrolled in summer programs cancelled at least two months before their departure; (d) enrolled in Fall 2020 programs cancelled about four months before their departure; and (e) had expressed interest in study abroad to an advisor but had yet to enroll in a program. The survey was open for three weeks, and students received one email reminder to complete it, yielding a response rate of 27 percent. The sample of 717 respondents was restricted to undergraduate respondents. Seven students only answered the first three questions of the survey³ and these respondents were removed from the sample. We estimate an ordered probit model to examine the effects of the pandemic on students' interest in future study abroad. We used an alpha level of 0.05 to report statistical significance.

The dependent variable is *Interest in Study Abroad*, which is based on participants' responses to the question "Please indicate your interest in studying abroad in the future." Response choices were based on a five-point Likert scale, from "very unlikely" (1) to "very likely" (5).

The independent variables draw on survey questions related to respondents' perceptions of the pandemic and factors that studies show influence students' decisions to study abroad (Salyers et al. 2015: 369). Of these independent variables, six are created from factor analyses of conceptually related items on the survey. For the factor analysis, we identified items that load on each factor.⁴ From these loadings, we created additive indexes, which were entered into the model as independent variables.

The first factor analysis included items on the survey that asked respondents to indicate the level importance of "COVID-19 pandemic," "destination of program," "which term a program is offered," "concerns over traveling," "risk of cancellation," "scholarships," "family finances," and "program cost" as considerations in their decision to study abroad. Two variables, *Risk* and *Finances*, based on the additive indexes were created from the loadings of the two factors extracted. The second factor analysis comprised survey items on how students felt when their study abroad plans were interrupted. These feelings were anger, anxiety, sadness, relief, happy, calm, grief, rage, panic, longing, and nervous. Items loaded on four factors, for which additive indexes, and four variables, were created: *Exasperation*, *Acceptance*, *Uncertainty*, and *Loss*.⁵

² The university's study abroad office distributed the survey on our behalf.

³ See full survey instrument in Appendix A.

⁴ The threshold used for including measures was 0.50.

⁵ See Appendix B for tables with results from the factor analyses.

Additional independent variables are based on responses to survey items that capture students' academic experience(s) with the interruption of study abroad (*Academic Disruption*); students' perceived the value of study abroad (*Value of Study Abroad*); and their progression toward the completion of their studies (*Year and College*). Table 2 presents a full description of all variables.

Results

Generally, the sample reflects the population of study abroad participants at our university in all but one aspect—the representation of respondents across year.⁶ Table 1 presents a snapshot of the composition of the sample. First and second-year students are over-represented in the sample, 19.41 percent and 34.78 percent, respectively, while seniors are under-represented comprising about 9.5 percent. Juniors represent 36.31 percent of the sample.⁷ Students pursuing majors in engineering made up the largest share of the sample (25.38 percent) which is on par with the representation of engineering students enrolled in study abroad programs at the university. Similarly, the composition of respondents based on the college of studies is representative of the distribution of participants in the university's various study abroad programs. Among the colleges in which students are pursuing degrees, respondents from the Colleges of Pharmacy, Exploratory Studies, and Veterinary Medicine make up the smallest shares.

Table 1
Sample Composition

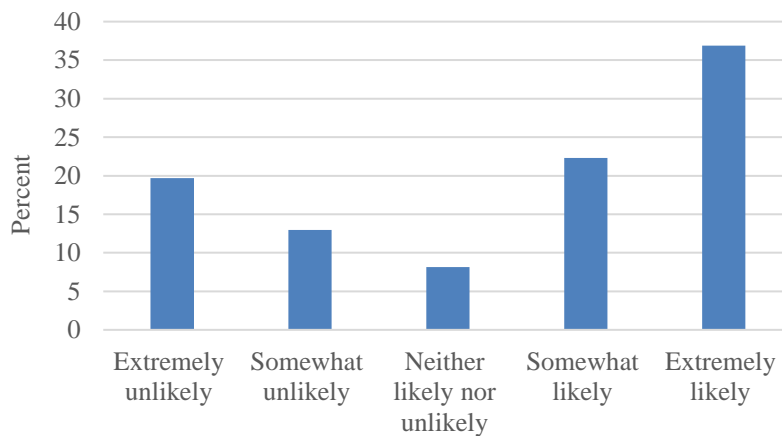
Dimension		Count	Dimension	Count		
Year	First year	139 (19.4%)	Program type	Semester exchange	190 (26.6%)	
	Second year	249 (34.9%)		Short term spring break	111 (15.6%)	
	Junior	260 (36.3%)		Short term May	189 (26.5%)	
	Senior	68 (9.5%)		Short term summer	199 (27.9%)	
College	Agriculture	89 (12.4%)		Other	24 (3.4%)	
	Education	20 (2.8%)		Multiple programs	24 (3.4%)	
	Engineering	182 (25.4%)		Destination	Europe	469 (69%)
	Exploratory Studies	9 (1.3%)			Asia	59 (8.7%)
	Health/Human Sciences	132 (18.4%)			Africa	22 (3.2%)
	Liberal Arts	71 (9.9%)			Latin America	66 (9.7%)
	Management	55 (7.7%)			North America	10 (1.5%)
	Pharmacy	12 (1.7%)	Oceania		54 (7.9%)	
	Polytechnic	55 (7.7%)				
	Science	83 (11.6%)				
	Veterinary Medicine	9 (1.3%)				
	Honors	118 (16.5%)				

⁶Based on data from the university's Office of Study Abroad.

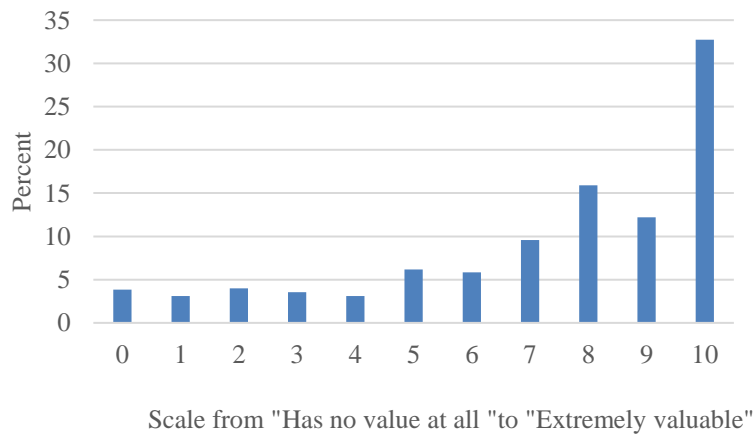
⁷Program enrollment at the university is as follows: first- and second-year students comprise 3 percent and 12 percent, respectively, while seniors make up 52 percent.

Regarding features of programs in which students were enrolled—when, where, and duration—programs with certain characteristics were more popular than others. Students in our sample reported at a higher frequency to be about to embark on a short-term program during 2020 (73.35%), rather than an exchange program (26.65%). They also reported more frequently to being enrolled in programs scheduled to occur during different periods of the summer (May and summer, 54.42%). Where short-term programs are concerned, fewer students were scheduled participants in programs taking place over spring break than the mini-summer module (May) and summer programs. Students were most commonly enrolled in programs destined for Europe (68.97%).

Figure 2
Interest in Future Study Abroad and Value of Study Abroad



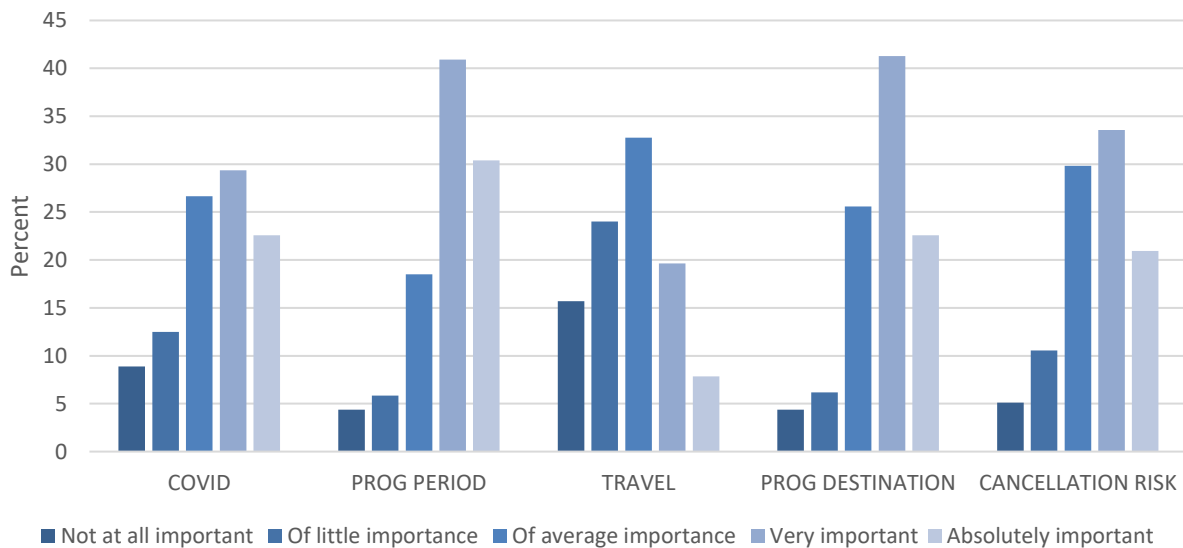
Responses to Question: “Please indicate your interest in studying abroad in the future.”



Responses to Question:
“... indicate the value of studying abroad to you during your remaining time at Purdue?”

We turn now to the summary statistics, presented in Table 2, of the variables included in the regression analysis. On average, respondents are tepid about their interest in participating in a study abroad program in the future (mean of 3.44). Their value of studying abroad during their remaining time is, on average, high (mean 7.31). Figure 2 shows frequency distributions of responses to the item on interest in study abroad and their value of study abroad. On average, respondents' academic progress was unaffected by the cancellations. Where risk calculations (the variable *Risk*) are concerned, students place, on average, "Average Importance" on COVID-19 and attendant concerns surrounding travel, including when and where they go. The frequency distributions in response to the question, "Using the scale below, indicate how important the following factors are on your decision to participate in a study abroad program in the future," though, reveal greater importance placed on these considerations independently, except in the case of "Travel," by more students, as shown in Figure 3.

Figure 3
Levels of Importance of Factors Considered in Decision to Study Abroad



Responses to Question: "Using the scale below, indicate how important the following factors are on your decision to participate in a study abroad program in the future."

On average, financial considerations (*Finances*) are of "Average Importance" as well. When we look at those variables that are proxies for respondents' experiences with study abroad—*i.e.*, their emotions when programs were cancelled/interrupted and the impact of the disruption on their academic progress—on average they more felt *Loss* (0.68) and less so *Uncertainty*. On average, they were in a state of *Acceptance* (0.08).

Table 2
Summary Statistics

Full Sample (n=717)					
Variable	Mean	Std. Dev.	Min	Max	Description
<i>Dependent variable</i>					
Interest in Study Abroad	3.44	1.56	1	5	ordinal variable, 1-5 Likert scale, where 1 is extremely unlikely and 5 is extremely likely
<i>Explanatory variables</i>					
Value of Study Abroad	7.31	2.93	0	10	ordinal variable, 0-10 scale, where 0 is “has no value at all” and 10 is “extremely valuable”
Risk	3.48	0.75	1	5	index of ordinal items on COVID, travel, destination, period, potential program cancellation, where 1=not at all, 2=of little importance, 3=of average importance, 4=very important, 5=absolutely important
Finances	3.54	1.03	1	5	index of ordinal items on program cost, family finances, scholarships, where 1=not at all, 2=of little importance, 3=of average importance, 4=very important, 5=absolutely important
Year	2.36	0.9	1	4	ordinal variable, 1-4, where 1=first-year, 2=second-year, 3=junior, 4=senior
College	5.16	2.89	1	11	categorical variable, 1-11 for each college of study
Academic Disruption	2.22	0.88	1	3	categorical variable, 1-3, where 1=yes, my academic progress was disrupted, 2=I don't know, 3=no, my academic progress was not disrupted
Exasperation	0.44	0.34	0	1	additive index of binary items on emotions of anger, rage, and grief
Acceptance	0.08	0.17	0	1	additive index of binary items on emotions of happy, relief, and calm
Loss	0.68	0.3	0	1	additive index of binary items on emotions of longing and sadness
Uncertainty	0.29	0.33	0	1	additive index of binary items on emotions of anxiety, panic, and nervous

To understand the factors that affect students’ perceptions of study abroad participation in the near future, especially during this era of the coronavirus pandemic, we estimate ordered probit models with *Interest in Study Abroad* as the dependent variable. Our explanatory variables encompass factors surrounding perceptions of risk, financial considerations, past experience with

study abroad, progress in completing a degree, and the value students place on study abroad. Table 3 presents the results of the regression models.

In Model 1, we examine the relationship between concerns about the coronavirus and interest in future study abroad. The bivariate model indicates that considerations of COVID alone do not have a statistically significant effect on interest in study abroad. Including other indicators in the model, Model 2, we find that several other factors have a statistically significant effect on students' perceptions of future study abroad. First, we find that how much students value study abroad has a positive effect on respondents' interest in studying abroad ($p < 0.01$). The more students place value on studying abroad during their undergraduate career, the more likely they are to be interested in participating in a future program.

Although students might hold study abroad in high regard, sometimes it is an unattainable aspiration without the requisite funds for supporting said experience. While students may cover expenses through personal/familial support networks, many also rely on institutional support, such as scholarships, to make participation a reality. We find that the higher the concern students place on finances, in the model measured by *Finances*, the less likely they are to be interested in study abroad in the future ($p < 0.05$). This finding might be due to the severe economic impact of the pandemic nationwide or general concerns students tend to have regarding the affordability of study abroad and opportunity costs of lost wages when they do participate. The pandemic itself and the cloud of insecurity it has created around travel between now and until a vaccine is found and distributed, particularly to destinations that are hardest hit by the virus, however, is not dampening interest around studying in a different country. Rather, the more importance students place on risk calculations, measured by the variable *Risk*, the more likely they are to study abroad ($p < 0.05$). This relationship is consistent with Relyea et al.'s finding that “[s]tudents with a higher propensity for risk were more likely to decide to venture abroad on an international experience,” given that their “high propensity for risk leads them to do things that may often be considered ‘out of the box’ by others, especially if the risky situation is positively viewed” (2008:356, citing Maner and Gerend 2007).

Regarding past experience with study abroad enrollment—operationalized as the emotions felt in response to programs being cancelled or interrupted in 2020 and the potential disruptions that the cancellations had on academic progress—rather than their feelings, students' academic progress has more bearing on future interest in study abroad. Of students' emotions toward program cancellation or interruption, only feelings relating to *Uncertainty* (nervous, anxiety, and panic) are statistically significant ($p < 0.05$) and negatively related to future study abroad interest. The directions of the relationships for the other emotions though are intriguing. Students who experienced *Exasperation* (anger, rage, and grief) are less likely to be interested in future programs, while those who experienced *Acceptance* (happy, calm, and relief) and *Loss* (longing and sadness) were more likely to be interested.

Based on the modal choice selected by respondents to the question “Has the program cancellation or interruption disrupted your academic progress?”, students' academic progress was not disrupted by program cancellations (51.86% respondents answered “No”). The regression model results indicate that compared to students whose progress *was* disrupted, those who responded “I don't know” significantly are more likely to have interest in future study

abroad ($p < 0.05$). This finding suggests that even though students are uncertain about the impact on their studies (which could be negative or neutral), they are still willing to study abroad relative to those who experienced disruption. There is no difference in perception of study abroad between students who *did* and *did not* experience disruption.

Table 3
Regression Estimates^a
Dependent Variable: Interest in *Study Abroad*

Variable	Model 1			Model 2		
	Coeff	Std Err ^b	Sig ^c	Coeff	Std Err ^b	Sig ^c
COVID Concerns	0.022	0.037				
Risk				0.185	0.076	**
Value of Study Abroad				0.269	0.021	***
Finances				-0.119	0.051	**
Exasperation				-0.190	0.170	
Acceptance				0.275	0.271	
Uncertainty				-0.390	0.151	**
Loss				0.201	0.161	
Academic Disruption (I don't know) ^d				0.309	0.142	**
Academic Disruption (No)				0.152	0.111	
Year				-0.465	0.06	***
College of Education ^e				-0.312	0.331	
College of Engineering				-0.349	0.172	**
College of Exploratory Studies				-0.619	0.292	**
College of Health/Human Sciences				-0.218	0.184	
College of Liberal Arts				-0.203	0.239	
College of Management				-0.615	0.204	**
College of Pharmacy				0.109	0.304	
College of Polytechnic				-0.002	0.214	
College of Science				-0.284	0.199	
College of Veterinary Medicine				0.053	0.389	
Pseudo R2		0			0.219	
Log pseudolikelihood		-984.374			-714.478	
Wald chi2		0.37			310.74	
n		663			615	

^a Ordered probit regression estimates.

^b Robust standard errors.

^c Significance levels denoted by ***= $p < 0.01$, **= $p < 0.05$

^d Omitted category "Yes" academic progress disrupted

^e Omitted category College of Agriculture

Finally, results indicate that the requirements for completing a degree and students' progression along their courses of study have bearing on their interest in future study abroad. The variable

Year (i.e., year in school) has a negative relationship with interest in studying abroad, suggesting that the closer students are to the end of their studies, the less likely they are to have interest in going abroad to study. Also, the difference among students belonging to different colleges and their view on study abroad speaks to degree-specific requirements and the role of study abroad in degree programs. For example, students in engineering, exploratory studies, and management are less likely than their peers pursuing studies in agriculture to have future interest in study abroad.

Discussion

In general, students want to study abroad in the future. However, several factors influence this perspective in one direction or another, including perceived value of study abroad, level of concern around risk, level of financial concerns, past experiences with study abroad, and progress toward degree. Where the current historical moment is concerned, our results of the survey and the regression analysis show that safety issues around COVID-19 alone do not diminish students' interest in study abroad. Rather, it is "traditional" factors in study abroad decision-making, such as broader considerations of risk, financial concerns, and classification, that are impacting future study abroad interest. Our results show that the pandemic itself did not significantly affect likelihood of future study abroad participation. Indeed, when students were presented with free-response options in the survey, both students planning to study abroad in the future and those *not* planning to study registered concerns they had about the pandemic, including health concerns for themselves or their family members.

That students placing a higher value on study abroad translated to increased likelihood of future participation in a study abroad program should not be surprising. What might seem less intuitive is the increased interest in study abroad for those who are highly concerned with risk. This trend, however, aligns with a previous study by Relyea et al., which "suggest[ed] that although students are aware of the inherent risks of studying abroad, they are more interested in the value that these experiences bring" (Relyea et al. 2008:359). Of course, COVID-19 may add significant forms of risk to these calculations, including new health concerns for themselves and/or members of their households.

Negative experiences (e.g., feelings of anxiety, panic, or rage or academic disruption) associated with program cancellations this year affected interest in future study abroad participation. This finding suggests an opportunity for study abroad program leaders and administrators. Even though the pandemic itself remains outside our control, we can still reduce some of the concerns driven by the pandemic by offering students clear information on cancellation policies and procedures and helping them to better understand how decisions related to health and safety will be made so that they are better equipped to make decisions about enrolling in programs. In fact, several students requested exactly this sort of transparency in their open-ended responses to help them evaluate risks and anticipate likelihood of cancellations.

Some students planning to enroll in future programs also provided suggestions that could help others overcome their lingering feelings of disappointment from this year, which included offering cancelled programs again as soon as possible and potentially offering a priority enrollment to students whose programs were cancelled this year. One student went so far as to express his/her fear that faculty might feel "discouraged" from offering study abroad programs in 2021. Their hope was that it would not be the case.

We can also be more sensitive to the financial needs of students and try to seek out additional sources of scholarships and/or program subsidies, given both the widespread economic devastation caused by the pandemic and the fact that our analysis showed increased concern over finances lowered future interest in study abroad. For example, a number of students were already concerned about the future of scholarships and financial support available through the university, given broad economic uncertainties in the U.S. economy. As such, program leaders should keep a closer watch than usual on institutional resources available to subsidize costs of programs and/or to assist individual students in financial need, especially those impacted financially by circumstances surrounding the pandemic.

Finally, our finding that likelihood of future study abroad participation decreases as year in school increases is consistent with the scheduling realities that students face as they progress through their degree programs. Students in earlier stages of their programs have sufficient time remaining at the university to work a short-term or even semester-long study abroad program into their degree plans, while juniors and seniors have less flexibility as they assess their remaining degree requirements or are presented with important professional opportunities. We saw this same trend in responses to open-ended questions in our survey, as many students noted they were graduating soon and therefore future study abroad was not an option for them without extending their degree plans. Such responses often included a range of emotional responses attached to this reality, from anger, to sadness, to regret, to understanding. Some in this position expressed they *would* enroll in a study abroad in the future if they were at earlier stages of their college education, and a few even remarked on their intention to look into study abroad opportunities during graduate school.

Conclusion

Our findings shed light on one of the immediate impacts of the COVID-19 pandemic on undergraduate students as they reflected on the cancellation of study abroad programs for calendar year 2020. The findings also offer insights into the longer-term effects COVID-19 may have on study abroad and the internationalization of education more broadly. Without a doubt, the ongoing pandemic caused massive changes in and disruptions to higher education generally and study abroad specifically since early spring 2020. We are still uncertain what “new normal” will emerge after that pandemic and how much it will be influenced by the events and conditions of these past several months (*i.e.*, the “temporary” “new normal”).

On the one hand, restrictions on mobility aimed at slowing the spread of the novel coronavirus affirm the need for further developing virtual and alternative forms of study abroad and for further expanding our use of digital tools for intercultural interactions and experiences. Over the past several months, in fact, the professional guides many program leaders hire for group walking tours created virtual versions of their city walks. In addition, the museum exhibitions we incorporate into our lesson plans posted virtual walkthroughs and galleries. Simultaneously, the scholars, organization staff, government officials, and other guest speakers who agree to meet with our students abroad have all become accustomed to digital meeting spaces. Program leaders and administrators should guard against suggestions to just move their study abroad programs on-line in the way that in-person courses were abruptly moved online in March 2020. At the same time, we should recognize the possibilities that online resources offer for responding to

unexpected global events and crises like the COVID-19 pandemic. Similarly, these resources hold potential for expanding access to study abroad-like experiences for those unable to enroll in traditional programs for any number of reasons.

On the other hand, as our results suggest, we should be prepared to “resume” study abroad as soon as possible, with students indicating they are ready to enroll in programs as soon as Spring Break 2021. In doing so, we should take seriously the concerns of students and be sensitive to their experiences of the COVID-19 pandemic, including those we have outlined in this paper. Although we cannot predict where the virus will be (and will not be) this coming year, when a vaccine will be available to publics here around the world, or what travel restrictions may still be in place by governments and educational institutions, what this study suggests is that students at this stage remain willing to enroll in and travel with study abroad programs when they become available. We know already that COVID-19 will produce a sudden and dramatic drop in the national study abroad participation trend line spanning the 2019–2020 and 2020–2021 academic years, however our findings suggest this decline could be contained to a relatively short period of time, as students already await the resumption of study abroad programming.

Some aspects of internationalized education may take longer to recover or may only recover in modified forms—*e.g.*, capital-intensive projects like planned branch campuses threatened with construction halts and/or budget freezes due to the pandemic—but for those relying primarily on individual interest and positive conditions of mobility and public health, such as study abroad and international fieldwork, we can expect a more rapid return. Key to returning to pre-pandemic trajectories, however, will surely be scholarships and other financial support for study abroad, given the economic hardships brought by the COVID-19 pandemic, which have been disproportionately felt by students underrepresented in higher education generally and study abroad specifically. At the same time, given the negative experiences associated with cancellations this past year, study abroad program leaders will want to communicate risks clearly and be sensitive to possible newfound anxieties over enrollment as we move forward. Finally, given the far-reaching, yet incredibly varied, impacts of COVID-19 around the world, program leaders should not miss the opportunity to incorporate this event into the content of their future study abroad programs (and not just their health and safety plans). As we take students into a “post-COVID-19” world for the first time, we can use the pandemic pedagogically to help students contextualize and process their personal experiences of this global event, just as we can help them appreciate both the unique constellations of particular places and the complex interdependencies of a globalized world through this unique case study.

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Appendix A Survey Instrument

Q1 Thank you for agreeing to participate in our survey. This questionnaire is being conducted to understand students' attitudes toward study abroad program cancellations during the COVID-19 pandemic and participation in future study abroad programs.

Q2 Please indicate your year.

First Year
Second Year
Junior
Senior
Grad/Professional

Q3 Please indicate your disciplinary college.

Agriculture
Education
Engineering
Exploratory Studies
Health and Human Sciences
Liberal Arts
Krannert
Pharmacy
Polytechnic Institute
Science
Veterinary Medicine

Q4 Are you a student in the Honors College?

Yes
No

Q5 Were you enrolled in a semester-long or year-long exchange program that was cancelled or interrupted?

Yes, for academic year 2019-2020
Yes, for Spring 2020
Yes, for Fall 2020
No

Q6 Were you enrolled in a short-term study abroad program that was cancelled?

Yes
No

Q7 During which period was your program to occur?

Spring Break 2020
Maymester 2020
Summer 2020

Winter Break 2020

Q8 Where was your program's destination?

Q9 With which college was your program affiliated?

Agriculture

Education

Engineering

Exploratory Studies

Health and Human Sciences

Honors College

Liberal Arts

Krannert

Pharmacy

Polytechnic Institute

Science

Veterinary Science

Other/Non-Purdue Provider (please specify): _____

Q10 How did you feel when your study abroad plans were interrupted? Please mark all that apply.

Anger

Anxiety

Sadness

Relief

Happy

Calm

Grief

Rage

Panic

Longing

Nervous

Other _____

Q11 Has the program cancellation or interruption disrupted your academic progress?

Yes _____

I'm not sure _____

No _____

Q12 How would you plan to overcome any disruption to your academic progress? Please mark all that apply.

I plan to enroll in other Summer 2020 credits.

I plan to enroll in a future short-term study abroad program.

I plan to enroll in additional credits in a future fall or spring semester.

I plan to enroll in additional credits in a future summer term.

I am unsure at this time.

Other _____

Q13 In addition to your exchange program, were you enrolled in a short-term study abroad program that was cancelled?

Yes (please indicate term, destination, and sponsoring college) _____

No

Q14 Please indicate your interest in studying abroad in the future.

How likely are you to participate in a study abroad program during your remaining time at this institution?

Extremely likely

Somewhat likely

Neither likely nor unlikely

Somewhat unlikely

Extremely unlikely

Q15 Using the scale below, indicate how important the following factors are on your decision to participate in a study abroad program in the future.

	Not at all important	Of little importance	Of average importance	Very important	Absolutely important
COVID-19 pandemic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Which term a program is offered	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concerns over traveling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Destination of program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scholarships/grants to support study abroad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Risk of cancellation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Family finances	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16 Please indicate, using the sliding scale below, when in the future you would most likely participate in a study abroad program. 0 refers to least preferred academic term and 10 most preferred academic term.

0 1 2 3 4 5 6 7 8 9 10

Spring Semester 2021

Spring Break 2021

Summer 2021

Further in the future

Q17 Where would be your preferred destination for a future study abroad program? Please rank order the regions below.

Sub-Saharan Africa

Latin America

East Asia

Europe

North America

Middle East/North Africa

Oceania

South/Central Asia

Q18 On the scale below, where 0 is “has no value at all” and 10 is “extremely valuable,” indicate the value of studying abroad to you during your remaining time at Purdue?

0 1 2 3 4 5 6 7 8 9 10

Q19 Is there anything else you would like to tell us about your interest in or plans for future study abroad programs?

Q20 We would like to offer you an opportunity to further process your experience as a student intended to participate in a study abroad program that was cancelled or interrupted. If you would like to engage in a reflection exercise on your deferred study abroad plans during the COVID-19 pandemic, please click here.

Appendix B
Results from Factor Analysis of Survey Items^a

Survey Item	Factor Loading	
	1	2
Factor 1: Risk		
Importance of COVID-19 on your decision to participate in a study abroad program in the future.	0.45	0.13
Importance of term program offered on your decision to participate in a study abroad program in the future.	0.62	0.10
Importance of concerns over traveling on your decision to participate in a study abroad program in the future.	0.41	0.26
Importance of program destination on your decision to participate in a study abroad program in the future.	0.64	0.11
Importance of risk of program cancellation on your decision to participate in a study abroad program in the future.	0.57	0.24
Factor 2: Finances		
Importance of scholarships/grants on your decision to participate in a study abroad program in the future.	0.28	0.84
Importance of family finances on your decision to participate in a study abroad program in the future.	0.21	0.88
Importance of program cost on your decision to participate in a study abroad program in the future.	0.19	0.89

^a N=660. The extraction method was principal component factoring with an orthogonal (varimax) rotation. Factor loadings above .40 are bolded.

Results from Second Factor Analysis of Survey Items^a

Survey Item	Factor Loading			
	1	2	3	4
Factor 1: Exasperation				
How did you feel when your study abroad plans were interrupted? Anger	0.72	0.04	0.13	-0.17
How did you feel when your study abroad plans were interrupted? Rage	0.71	0.17	-0.13	0.01
How did you feel when your study abroad plans were interrupted? Grief	0.56	0.08	0.46	-0.01
Factor 2: Uncertainty				
How did you feel when your study abroad plans were interrupted? Nervous	0.05	0.79	-0.04	0.05
How did you feel when your study abroad plans were interrupted? Anxiety	0.09	0.78	0.09	-0.02
How did you feel when your study abroad plans were interrupted? Panic	0.45	0.54	-0.03	-0.01
Factor 3: Acceptance				
How did you feel when your study abroad plans were interrupted? Happy	0.08	0.06	0.02	0.73
How did you feel when your study abroad plans were interrupted? Relief	-0.34	0.05	0.14	0.63
How did you feel when your study abroad plans were interrupted? Calm	-0.16	-0.18	-0.33	0.50
Factor 4: Loss				
How did you feel when your study abroad plans were interrupted? Longing	0.09	-0.12	0.76	0.15
How did you feel when your study abroad plans were interrupted? Sadness	-0.12	0.28	0.62	-0.21

^a n=673. The extraction method was principal component factoring with an orthogonal (varimax) rotation. Factor loadings above .40 are bolded.